

REMARKS

The specification and drawing are attended to above to avoid the objections in the Action. In particular, an "AB thermally cured adhesive" is believed to be known to those of ordinary skill in the art, and is correspondingly defined as -- i.e., two-component -- in the replacement paragraph of the specification beginning at page 2, line 29 (as numbered) but deleted from claims 16 and 31.

The rejections under 35 USC 102 for anticipation by the cited Morey, et al. and Bulman, et al. patents require that every element of these claims be disclosed in the patents, and this is not the case.

The Morey, et al. US Patent No. 5,042,898 is prior art like that described on page 2 of the specification and Fig. 10 of the subject application. As indicated, though the thermal compensating device of the '898 patent can reduce thermal effects to the optical fiber, its complicated construction and the need of an additional pre-loading process cause difficulty in manufacturing and increase manufacturing cost. Particularly, the thermal compensating device (20) as illustrated in Fig. 3 and described in Lines 26-30, Column 4 of the specification of the '898 patent, comprises a U-shaped first compensating member (21) having a central recess (23), and a T-shaped second compensating member (22) having a central projection (24) extending into the recess 23 and terminating short of the bottom of the latter. The compensating device (20) of the '898 patent is a complicated and symmetric structure that is difficult to manufacture and handle.

In comparison, the compensating device (10) of the subject invention, as illustrated in Fig. 1, comprises a substrate (12) formed with an indent (122) having two opposite lateral ends and a first length (L1) defined between the two opposite lateral ends, allowing an elongated first metal block (14) having a second length (L2) smaller than the first length (L1) to be transversely affixed to one of the two opposite lateral ends of the indent (122) of the substrate (12) such that a space (124) is formed between the other end of the indent (122) of the substrate (12) and the metal block (14). In contrast to the narrow and deep central recess (23) of the first compensating member (21) of the '898 patent, the indent (122) of the substrate (12) of the subject invention is wide and very shallow. In contrast to the T-shaped second compensating member (22) of the '898 patent, the first metal block (14) of the subject invention is a simple and elongated metal block. Especially, the first metal block (14) of the subject invention is transversely disposed within the indent (122) of the substrate (12), in contrast to the central projection (24) of the second compensating member (22) of the '898 patent which longitudinally and deeply extends into the narrow and deep central recess (23) of the first compensating member (21). The compensating device of the subject invention is a simple and asymmetric structure that is very easy and convenient to manufacture and handle.

According to the subject invention, the center wavelength shift is less than 5pm between 5°C and 45°C. In other words, it is only 0.125pm/°C that is much smaller than commercial specification. For the present commercial specification, the thermal stability is 1pm/°C for general specification and 0.5pm/°C for tight (high) specification. Therefore, the subject invention makes significant improvements and has an inventive step over relevant known art.

In order to distinguish the patentable features of the subject invention from the '898 patent, the applicants amend the specification and claims as shown in the attachment, in which the spatial configuration of the indent of the substrate and the arrangement relationship between the indent of the substrate and the first metal block are further clearly described and defined.

Based on the amended claims to be effected, the subject matters recited in Claims 10, 11, 12, 16, 17, 19, 26, 27, 33 and 35 of the subject application are patentably distinguishable from the '898 patent.

U.S. Patent No. 6,393,181:

As illustrated in Figs. 3a & 3b of the '181 patent, the package (20) comprises a second cylindrical member (25) and two end portions (23) and (24) respectively disposed on one end of the cylindrical member (25). Unlike the examiner's assertion, the cylindrical member (25) of the '181 patent is not equivalent to the substrate (12) of the subject invention, because the cylindrical member (25) of the '181 patent is a hollow and cylindrical tube having two open ends, and is formed with no indent corresponding to the indent (122) of the subject invention. In contrast to the hollow, elongated, cylindrical space formed within the cylindrical member (25) of the '181 patent, the indent (122) of the substrate (12) of the subject invention is a wide and shallow recess having two opposite terminal endwalls for defining a first length (L1) therebetween, and allowing an elongated metal block (14) to be transversely disposed therein. In the '181 patent, it is essential to dispose two end portions (23) and (24) at two open ends of the cylindrical member (25), so that two ends of a fiber (22) can be affixed to the package (20). In the subject invention, only one single metal block (14) is required to be disposed within the indent (122) of the substrate (12). In operation, when two end portions (23) and

(24) are disposed at two open ends of the cylindrical member (25), the cylindrical member (25) is in a sealed condition that is inaccessible to an operator, and thus is difficult in operation for affixing two ends of the optical fiber 22 to two end portions (23) and (24). In contrast, since the indent (122) of the substrate (12) is always in an open condition accessible to an operator, it is very convenient for an operator to affix two ends of the optical fiber (66) to the substrate (12) and the metal block (14). As compared with the '181 patent, the thermal compensating device of the subject invention is a very simple structure that is easy and convenient to manufacture and handle, and thus should be considered having an inventive step over the '181 patent.

Based on the amended claims to be effected, the subject matters recited in Claims 10, 14, 15, 26, 28 and 29 of the subject application are patentably distinguishable from the '181 patent.

Claim Rejections - 35 USC §103:

US Patent No. 5,042,898 in View of US Patent No. 2,531,308:

In view of the above, since the independent Claim10 is novel and possess an inventive step in view of the '898 patent, and Claims depending from Claim 10 should also be considered having an inventive step.

US Patent No. 5,042,898 in View of US Patent No. 6,282,340:

In view of the above, since the independent Claims 10 and 26 are novel and possess an inventive step in view of the '898 patent, the dependent Claims 18 and 20 depending from Claim 10, and Claims 34 and 36 depending from Claim 26, should also be considered having an inventive step.

US Patent No. 5,042,898 in View of US Patent No. 6,377,727:

In view of the above, since the independent Claims 26 is novel and possesses an inventive step in view of the '898 patent, its dependent Claims 30-32 should also be considered having an inventive step.

Respectfully submitted,

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